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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/759,914	01/16/2004	Joseph E. Yokajty	86936RLO	8040
<div>7590 03/22/2007 Pamela R. Crocker Patent Legal Staff Eastman Kodak Company 343 State Street Rochester, NY 14650-2201</div>			<div>EXAMINER CHIMIAK, EMILY ANN</div>	
			<div>ART UNIT 1733</div>	<div>PAPER NUMBER</div>
SHORTENED STATUTORY PERIOD OF RESPONSE			MAIL DATE	
3 MONTHS			03/22/2007	
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

# Office Action Summary

Application No.

10/759,914

Applicant(s)

YOKAJTY ET AL.

Examiner

Emily Chimiak

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 01/0/2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 2,4,7,9,12-14, 16-19 and 20-36 is/are pending in the application.
- 4a) Of the above claim(s) 16-19 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 2,4,7,9,12-14,20-25,29,34 and 36 is/are allowed.
- 6) ☒ Claim(s) 26-28 and 30-33 is/are rejected.
- 7) ☒ Claim(s) 36 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 January 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 09/05/2006
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_

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## DETAILED ACTION

### *Claim Objections*

1. Claim 36 is objected to because of the following informalities: To follow the numeric order, claim 36 should be renamed claim 35. Appropriate correction is required.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. Claims 26-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Park et al. (US 2002/0155320) in view of Park et al. (2003/0218422), Beteille et al. (US 20050002081) and McCormick et al. (US 6867539).

As to claim 26, Park et al. '320 discloses a method of bonding a cover plate 120 to an OLED device 102 where each OLED device includes display area an area that emits light and an area receiving a driving voltage (an electrical interconnect area). The method comprises providing a flow-preventing pattern 119 on the cover, dispensing adhesive 118 (curable in one embodiment) outside of the EL structure area (paragraph 0073) and, engaging the cover plate with the device substrate such that the adhesive material flows towards the EL structure and is prevented from being diffused therein (paragraph 0007, 0072 and 0073).

Park et al. '320 does not disclose a plurality of OLED devices, surrounding the interconnect areas with the flow-preventing pattern, or a closed rectilinear pattern.

However, Park et al. '422 discloses bonding a cover to a plurality of OLED devices through an adhesive to allow mass production (paragraph 0012). McCormick et al. teaches that it is advantageous to leave the leads of OLED electrical connections (interconnect area) free of adhesive in order to easily attach the power supply or drive electronics, i.e. surrounding the interconnect areas with the flow preventing pattern. Bateille et al. discloses using a peripheral seal when bonding rigid substrates that contain active systems sensitive to moisture, i.e. a closed pattern (paragraph 0046, 0048 and 0049). It is noted that closing the flow-preventing-pattern of Park et al. '320 would create a rectilinear pattern.

It would have been obvious one of ordinary skill in the art to modify the bonding method of Park et al. '320 to cover a plurality of OLED devices at once as taught by Park et al. '422 in order to allow mass production, to protect the EL device from moisture by using a peripheral seal as taught by Bateille et al. and to surround the interconnect areas in order to prevent adhesive

from contacting the area, which would make it difficult to attach the power supply or drive electronics.

As to claim 27, Park et al. '320 discloses that dams (79, 199, 129, 139A, 139B) have the same function as the grooves (paragraph 0052 and 0057).

As to claim 28, Park et al. as modified by Bateille et al. discloses forming the seal by extrusion, but does not disclose that the seal is made with a curable adhesive material having a viscosity in the range from 25,000 to 250,000 cp.

However, Park et al. '422 discloses a seal formed by applying a first sealant with viscosity 100, 000 CP.

It would have been obvious at the time of invention to one of ordinary skill in the art to use an adhesive with a viscosity of 100, 000 CP as taught by Park et al. '422 to form dams that maintain their shape.

6. Claims 30-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Park et al. '422 in view of Liedenbaum (US 20020074931) and McCormick et al.

As to claim 30, Park et al. '422 discloses a method of bonding a cover plate over OLED devices formed on a surface of a device substrate wherein each one of the OLED devices includes at least one electrical interconnect area, comprising: a) providing a flow-preventing pattern 410 on a surface of the cover plate or the OLED devices absent from the electrical interconnect areas of the OLED devices to prevent flow of a flowable adhesive, dispensing

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flowable curable adhesive 411 on the surface of the encapsulation plate, c) engaging the cover plate in alignment with the device substrate so that the selected amount of the flowable adhesive material spreads to the nearest edge(s) of the flow-preventing pattern and over the display area of each one of the plurality of OLED devices and being prevented from spreading into the flow-preventing pattern (figures 3C-3F, 4C-4F, paragraphs 0012-0014 0019-0033).

Park et al. '422 does not disclose the pattern defining at least one opening in a position spaced from the electrical interconnect areas.

However, Liedenbaum teaches a channel on the EL interface to control the displacement of excess adhesive and to relieve pressure caused by curing (paragraph 0007). Although the channel can be placed at any of the four corners, the teaching of McCormick et al. that electrical interconnect areas should be free of adhesive would make it obvious to one of ordinary skill in the art to place the channel spaced from the electrical interconnect area (col. 12 lines 55-59).

It would have been obvious to one of ordinary skill in the art at the time of invention to provide a seal of Park et al. '422 with a channel to relieve pressure while curing the adhesive while preventing adhesive from reaching the electrical interconnect areas as taught by Liedenbaum with McCormick et al.

As to claims 31, in the figures Park et al. '422 discloses forming dams.

As to claim 32, Park et al. '422 discloses dams being formed from dispensing an adhesive material of 100, 000 cp.

As to claim 33, the pattern taught by Park et al. '422 includes dispensing a plurality of unidirectional dams, a plurality of closed rectilinear dams, a plurality of partially open rectilinear dams, or a plurality of perpendicular sets of dams (figures).

***Allowable Subject Matter***

8. Claims 2, 4, 7, 9, 12-14, 20-25, 29, 34 and 36 are allowed.

None of the references in combination teach preventing the flow of adhesive into a groove when bonding the interface of an OLED device.

The groove of Park et al. '320 serves to collect excess adhesive, as noted by applicant.

***Response to Arguments***

9. Applicant's arguments with respect to claims 26 and 30, concerned with surrounding the interconnect area and an opening in the seal have been considered but are moot in view of the new ground(s) of rejection.

The applicant's arguments regarding adhesive flowing into the groove pattern have been considered and are found persuasive. Therefore, claims 2, 20 and 25 have been found allowable.

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

### ***Conclusion***

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Emily Chimiak whose telephone number is (571)272-6486. The examiner can normally be reached on Monday-Friday 8:30-5:30 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on (571)272-6486. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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EAC



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